



## Performance Communications Appliance for the Intel® Pentium® M Processor

### Product Overview

The Performance Communications Appliance for the Intel® Pentium® M Processor is designed to deliver high levels of performance and functionality to accommodate the demands of today's communications market segment applications, including firewall, virtual private network, voice over IP, Web caching, load balancing, gateways, and e-Commerce devices. With the new Intel® Pentium® M processor and the Intel® E7501 chipset, this appliance is equipped to address many of the most bandwidth-intensive connectivity design issues, thus delivering a new level of services to the network.

The Performance Communications Appliance for the Intel Pentium M Processor helps developers reduce time-to-market, as it is easily modified to fit specific needs without reworking the core microprocessor and chipset design. Its performance, scalability, and reliability provide an ideal platform for new designs targeting the fast-moving communications market segment.

This proof of concept contains the following: board with CPU, memory, hard drive and power supply, user's manual, CD-ROM containing schematics (Orcad v9 & PDF), and materials list.

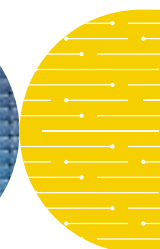
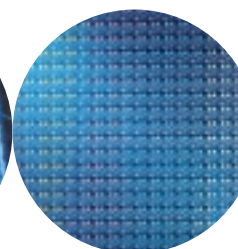
### Product Highlights

- 1.6 GHz Intel Pentium M processor featuring 1 MB of L2 cache and microarchitectural enhancements. It is designed to scale with future performance and power variations of the Intel Pentium M processor.
- Intel E7501 chipset, designed with next-generation chipset technology:
  - 400 MHz processor front-side bus
  - Support for DDR 200/266 RAM (PC2100 registered)
  - ECC for enhanced data integrity



- 256 MB of DDR 266 RAM, upgradeable to 1 GB
- Flexible networking and I/O capabilities:
  - 64-bit 133 MHz PCI-X 1.0 slot
  - 32-bit 33 MHz PCI 2.2 slot
  - Two copper Gigabit Ethernet ports utilizing the Intel® 82546 dual Ethernet controller
  - One 10/100BASE-T Ethernet port utilizing the Intel® 82551 Ethernet controller
  - Two USB 1.1 ports
  - Two serial ports (RS-232)
  - Two PS/2 ports (mouse/keyboard)
  - Floppy disk drive connector
- Hard disk drive with bootable Red Hat® 9.0 Linux® image
- Up to four disk drives or other ATA/100 devices supported
- 250W ATX power supply
- AMI BIOS
- Micro-ATX form factor (9.6" x 9.6")

Intel in  
Communications



## Benefits for Developers

The Performance Communications Appliance for the Intel Pentium M Processor has significant advantages for developers:

### Time-To-Market

This comprehensive platform solution can help accelerate time-to-market. Intel works with independent hardware and software vendors to quickly enable the implementation of designs.

### Economical

- Schematics are available for download at no cost from Intel's Developer Site at: [developer.intel.com/platforms/applied/eiacomm/reference\\_configs.htm](http://developer.intel.com/platforms/applied/eiacomm/reference_configs.htm)
- Delivers an excellent price/performance solution.

### Extended Product Lifecycle

Embedded Intel® Architecture components are designed to meet the extended lifecycle requirements of communications applications.

### Scalable and Flexible

- Intel's scalable platform allows developers to use the same design but populate it with differing Intel processors for specific performance needs.
- The scalability of Intel Architecture enables developers to differentiate their products with value-added features and functionality while maintaining the level of performance that end users expect.

### Quality

Intel's quality requirements help ensure product reliability and customer satisfaction.

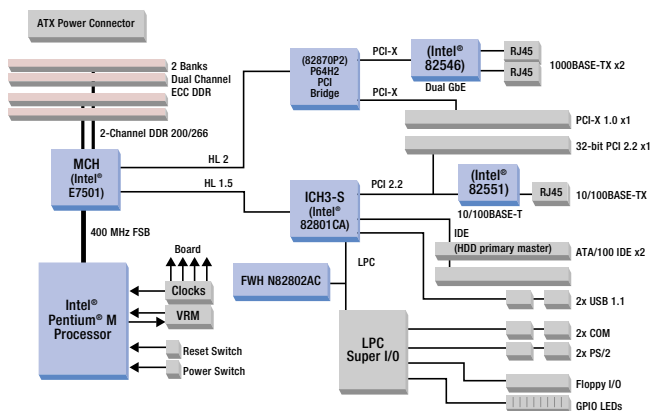
### Broad Application Support

This platform is based on the open Intel Architecture that is familiar to a broad range of programmers. The architecture supports multiple operating systems, including Linux, QNX\*, VxWorks\* and Microsoft Windows\*.

## Third-party Vendor Support

Intel works with multiple independent hardware and software vendors to enable the efficient implementation of designs based on the Performance Communications Appliance for the Intel Pentium M Processor.

### Block Diagram



## Intel Access

Developer's Site:	<a href="http://developer.intel.com">developer.intel.com</a>
Embedded Intel Architecture Homepage:	<a href="http://www.intel.com/design/intarch">www.intel.com/design/intarch</a>
Intel Technical Documentation Center:	<a href="http://www.intel.com/go/techdoc">www.intel.com/go/techdoc</a>
General Information Hotline:	(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST

For more information, visit the Intel Web site at: [developer.intel.com](http://developer.intel.com)

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